TTUKa Data Formats

Raw SIGMET format (.raw)

Data were uploaded to the archive in the rawest form possible, as requested. For the TTUKa radars, these data are the RAW SIGMET files. More information regarding the RAW SIGMET format can be found here:

ftp://ftp.sigmet.com/outgoing/manuals/IRIS_Programmers_Manual.pdf

Each raw file contains one "volume". For PPI sectors, these are sectors at multiple elevation angles. For RHIs, volumes are multiple RHIs along the same azimuth. Radar data are typically converted to a different format prior to processing. The RAW SIGMET files of each radar can be converted to netCDF (or uf or dorade sweep files) using EOL's Radx software, found here:

https://www.eol.ucar.edu/software/radx

Additional software to convert from SIGMET to another format is available through ARM. After conversion, the radial velocity will need to be quality controlled and synthesized with the quality controlled data of the second radar to obtain the dual-Doppler 2-D wind fields. Information regarding both of these processes is readily available in the scientific literature.

ASCOPE format (.ascope)

ASCOPE is a SIGMET tool that can be used to stare at a single point in space and collect data at a high temporal resolution. The file structure is similar to the SIGMET RAW format. Full documentation of the file structure (including the bite counts for reading the files) is available through SIGMET.